

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A method for automatic management of demand for non-durables, said method comprising

providing at End-users' premises specialized electronic boxes having microprocessor capability for performing the following functions:

receiving broadcast control signals from a Multi Utility provider, determining calculating whether information contained in said broadcast control signals, stored algorithms and End-user adjustable parameter value settings satisfies ON-or-OFF constitutes a correct condition for any connected non-durable consuming apparatus to be switched on, on the basis of information contained in said broadcast control signals, stored algorithms and End-user adjustable parameter value settings,

if so, turning connected non-durable consuming apparatuses on and if not, turning connected non-durable consuming apparatuses off in accordance with the results of said calculating,

End-users programming said boxes by setting parameter values in accordance with End-users' priorities,

broadcasting from a Multi Utility provider a control signal to be received by said boxes,

said boxes taking automatic turn-off or turn-on action for some non-durable consuming apparatuses in accordance with stored control algorithms, parameter values set by said End-users and information provided by said control signal, and

said boxes transmitting back to said Multi Utility provider instant or semi-instant non-durable consumption values at said End-users' premises, thereby collectively influencing market pricing of said non-durables.

2. (Previously Presented) The method of claim 1, wherein said End-users set parameter values in accordance with estimated importance of their various

apparatuses.

3. (Previously Presented) The method of claim 1, wherein said End-users set parameter values based on pricing of the non-durables.
4. (Previously Presented) The method of claim 1, wherein said Multi Utility provider broadcasts a control signal containing pricing information regarding said non-durables.
5. (Previously Presented) The method of claim 4, wherein the control signal contains pricing information regarding pricing valid for a certain time period.
6. (Previously Presented) The method of claim 1, wherein said Multi utility provider broadcasts a control signal containing information regarding rationing.
7. (Previously Presented) The method of claim 1, wherein said Multi Utility provider provides at least one of electrical energy, thermal energy, gas and freshwater to a community of End-users.
8. (Previously Presented) The method of claim 1, wherein said Multi Utility provider broadcasts the control signal via at least one commercial radio broadcasting station.
9. (Previously Presented) The method of claim 8, wherein said commercial radio broadcasting station utilizes anyone of the RDS, RBDS and DAB systems for broadcasting the control signal.
10. (Previously Presented) The method of claim 1, wherein said Multi Utility provider broadcasts the control signal via a satellite radio broadcast system.
11. (Previously Presented) The method of claim 1, wherein said boxes transmit back consumption values via any of a telephone network and a mobile telephone network.

12. (Previously Presented) The method of claim 1, wherein communication between said electronic boxes and said non-durable consuming apparatuses inside said End-users' premises is effected by use of PLC technology, preferably in accordance with an X10 standard.

13. (Currently Amended) The method of claim 1, wherein any one of said electronic boxes is physically or functionally divided in an intelligent home gateway and a metering gateway, said intelligent home gateway receiving said control signals, decoding them, calculating determining ON and OFF conditions for all connected apparatuses and transmitting turn-off and turn-on commands to bring said apparatuses into the calculated determined condition, while also communicating with said metering gateway, and said metering gateway performing two-way communication with said intelligent home gateway, performing communication with at least one non-durables metering device, and transmitting at least metering data to said Multi Utility provider.

14. (Previously Presented) The method of claim 13, wherein said intelligent home gateway transmits commands for turning connected apparatuses in an End-user's premises off and on, via a Power Line Carrier (PLC) system, preferably an X10 system.

15. (Previously Presented) The method of claim 13, wherein said intelligent home gateway turns off connected apparatuses in an End-user's premises in accordance with non-durable price thresholds set by the End-user for respective apparatuses or for respective apparatus groups.

16. (Previously Presented) The method of claim 13, wherein said intelligent home gateway turns off connected apparatuses in an End-user's premises in accordance with a rationing command from said Multi Utility provider and non-durable consuming apparatus priority settings entered by the End-user.

17. (Previously Presented) The method of claim 1, wherein non-durables production in distributed generation units (DG) attached to any of industrial End-users, commercial End-users and groups/communities of private End-users, is governed by said electronic boxes and in accordance with the End-users' settings and priorities.

18. (Previously Presented) The method of claim 17, wherein a distributed generation unit (DG) attached to a group/community of private End-users is governed by an algorithm taking all said private End-users' settings and priorities into consideration, said algorithm being stored in a computer memory in a computer dedicated for controlling said distributed generation unit and being in communication with said electronic boxes.

19. (Previously Presented) The method of claim 1, wherein service restoration from said Multi Utility provider after an outage situation is effected by broadcasting restoration signals to bring about step-wise turning on loads at End-users' premises by appropriate action by said electronic boxes.

20. (Currently Amended) A system for automatic management of demand for non-durables, said system

comprising

specialized electronic boxes at End-users' premises, with microprocessor capability for performing the following functions:

receiving broadcast control signals from a Multi Utility provider, means for determining calculating whether information contained in said broadcast control signals, stored algorithms and End-user adjustable parameter value settings satisfies ON and OFF constitutes a correct condition for any connected non-durable consuming apparatus to be switched on, on the basis of information contained in said broadcast control signals, stored algorithms and End-user adjustable parameter value settings,

if so, turning connected non-durable consuming apparatuses on and if not, turning connected non-durable consuming apparatuses off in

accordance with the results of said calculating,
said system further comprising

non-durable consumption metering devices at said End-users' premises, in
communication with said electronic boxes, and
a broadcasting network for broadcasting from a Multi Utility provider a control
signal to be received by said electronic boxes,

wherein

said specialized electronic boxes are programmable by said End-users for
setting parameter values in accordance with said End-users' priorities,
said boxes are operative to take automatic turn-off and turn-on action for some
non-durable consuming apparatuses in accordance with stored control
algorithms, said parameter values and information provided by said control
signal[[, and]]
~~said boxes have transmitting capability for transmitting back to said Multi
Utility provider instant or semi instant non-durable consumption values,
thereby to collectively influence market pricing of said non-durables.~~

21. (Previously Presented) The system of claim 20, wherein said broadcasting
network is a commercial radio broadcasting network.

22. (Previously Presented) The system of claim 20, wherein said broadcasting
network is a satellite radio broadcast system.

23. (Previously Presented) The system of claim 20, wherein a return transmission
path for transmitting back said consumption values is via any of a telephone
network and a mobile telephone network.

24. (Previously Presented) The system of claim 20, wherein a communication path
between said electronic boxes and said non-durable consuming apparatuses in
said End-users' premises is a wire path, preferably relying on PLC technology and
an X10 standard.

25. (Previously Presented) The system of claim 20, wherein said broadcasting network includes microprocessor capability for encrypting data to be broadcast to End-users.

26. (Previously Presented) The system of claim 20, including distributed generation units (DG) for additional production of non-durables, attached to any of industrial End-users, commercial End-users and groups/communities of private End-users, said distributed generation units being governed by said electronic boxes and in accordance with the End-users' setting and priorities.

27. (Currently Amended) The system of claim 20, wherein anyone of said specialized electronic boxes is physically or functionally divided in an intelligent home gateway and a metering gateway, said intelligent home gateway being capable of receiving said control signals, decoding them, ~~calculating~~ determining ON and OFF conditions for all connected apparatuses and transmitting turn-off and turn-on commands to bring said apparatuses into the ~~calculated~~ determined condition, as well as communicating with said metering gateway, and
said metering gateway being capable of performing two-way communication with said intelligent home gateway, performing communication with at least one non-durables metering device, and transmitting at least metering data to said Multi Utility provider.

28. (Previously Presented) The system of claim 27, wherein the intelligent home gateway includes at least one of a microprocessor and an embedded controller.

29. (Previously Presented) The system of claim 28, wherein an End-user terminal is attached to said intelligent home gateway for presentation of messages to the End-user, decoded by said microprocessor.

30. (Previously Presented) The system of claim 27, wherein the intelligent home gateway includes a radio antenna and a radio signaling decoder for at least one of the RDS, RBDS and DAB systems.

31. (Previously Presented) The system of claim 27, wherein the intelligent home gateway has connected thereto a satellite reception antenna for receiving a satellite broadcast signal.
32. (Previously Presented) The system of claim 27, wherein the metering gateway includes a microprocessor for decoding information from the intelligent home gateway and from said metering devices.
33. (Previously Presented) The system of claim 20, wherein said non-durable is electric power, said Multi Utility provider is an Electrical Utility provider and said consumption metering devices are electricity meters.
34. (Currently Amended) A computer program product containing any of software code portions and computer program elements which, when said computer program product is run on any of a computer, processor and controller, causes said computer processor or controller to carry out the steps of:
determining whether information contained in received broadcast control signals,
stored algorithms and End-user adjustable parameter value settings satisfies a
condition for any connected non-durable consuming apparatus to be switched on;
if so turning connected non-durable consuming apparatuses on,
if not, turning connected non-durable consuming apparatuses off,
accepting End-users programmed specialized electronic boxes which have
microprocessor capability and have been programmed by setting parameter
values in accordance with End-users' priorities;
configuring said boxes to take automatic turn-off or turn-on action for some non-
durable consuming apparatuses in accordance with stored control algorithms,
parameter values set by said End-users and information provided by said control
signal, the method according to claim 1 that are executed by said electronic
boxes.

35. (Previously Presented) The computer program product of claim 34, included

in a computer readable medium.

36. (Currently Amended) A control broadcast control signal for providing operator information from a Multi Utility provider to specialized electronic boxes at End-users' premises, thereby to enable automatic management of demand for non-durables provided by a Multi Utility provider, said signal containing at least one of pricing information and rationing information regarding amount of consumption reduction.

37. (Currently Amended) The control broadcast control signal of claim 36, wherein the operator information is contained in

a data field,
a command field, and
an address field.

38. (Currently Amended) The control broadcast control signal of claim 37, wherein said data field is to hold at least pricing data and said command field is to hold at least rationing command instructions, if any, and the address field is to hold at least data regarding which electronic boxes should respond to contents of the data field and the command field.

39. (Currently Amended) The control broadcast control signal of claim 36, wherein said signal is an encrypted signal.

40. (Currently Amended) In-a A system for automatic management of demand for non-durables, [[in]] which system comprises:

a Multi Utility provider configured to transmit[[s]] control signals to a plurality of End-users on a broadcast channel;[[,]]

a data communication signal for providing End-user return information to said Multi Utility provider, thereby to enable non-durables delivery control and pricing influenced by demand, said signal containing at least non-durables consumption information and using a signal channel different from said broadcast channel.

41. (Currently Amended) A method for return signaling signalling in a two-way communication network between a Multi Utility Provider and a plurality of End-users having intelligent home gateways and metering point gateways, wherein a broadcast signal from said Multi Utility Provider wakes up one End-user's gateways at a time for collecting non-durables consumption data, and a SIM card that is identical for all End-users, is used for establishing a return signal using telephone or cellular connection to said Multi Utility Provider for delivering said data.

42. (Currently Amended) An apparatus for return signaling signalling in a two-way communication network between a Multi Utility Provider and a plurality of End-users, said apparatus being an apparatus at each End-user's premises and comprising:

an intelligent home gateway operative to receive a wake-up broadcast signal that triggers metering action, and

a metering point gateway operative to establish telephone or cellular connection to said Multi Utility Provider by means of a SIM card that is identical for all End-users, for delivering metering data regarding the respective End-user's consumption of non-durables.

Please add the following new claims:

43. (New) The method of claim 1, wherein said method further comprises the step of: providing to the End-users prices in real time.

44. (New) The method of claim 1, wherein said method further comprises the step of: said boxes transmitting back to said Multi Utility provider instant or semi-instant non-durable consumption values at said End-users' premises, thereby collectively influencing market pricing of said non-durables.

45. (New) The system of claim 20, wherein said system further comprises means to provide to the End-users prices in real time.

46. (New) The system of claim 20, wherein said boxes further comprises means to transmit back to said Multi Utility provider instant or semi-instant non-durable consumption values, thereby to collectively influence market pricing of said non-durables.